

ANPMP WEBINAR PRESENTATION.



ASSOCIATION OF NIGERIAN PRIVATE MEDICAL
PRACTITIONERS (ANPMP)

THE MAN AND HIS PROSTATE: HOW BEST MANAGED

with Prof. Olufunmilade OMISANJO Prof of Urology and H.O.D, Dept of Surgery, LASUCOM & LASUTH

SPEAKER



**Prof. Olufunmilade
OMISANJO**

Prof of Urology and H.O.D, Dept of Surgery
LASUCOM & LASUTH



**Kay A.
ADESOLA**

Chief Host

PRESIDENT, ANPMP



**Dr. Ned
OKORO, FAGP**

MODERATOR



**Prof. Oluwole
ATOYEBI**

FNMA, FNAMed.

CELEBRITY OF THE MONTH

REGISTRATION IS FREE

₦1,000 For CME Certificate

Tuesday
16TH
May, 2023

Time:
1PM - 3PM
ANPMP WEBINAR FOR MAY 2023
GMMI
zoom

Venue:

REGISTER



THE MAN AND HIS PROSTATE: How Best Managed

Olufunmilade Akinfolarin Omisanjo

{ MBBS(Ibadan), MSc(Liverpool), FWACS, FACS, FICS }

(Professor/Consultant Urologist)

Why Prostate ?

- Prostate diseases constitute majority of Urology Cases seen

Worldwide

- BPH is the most common benign tumour in males
- Carcinoma of the Prostate is the most commonly diagnosed malignancy in men beyond middle age

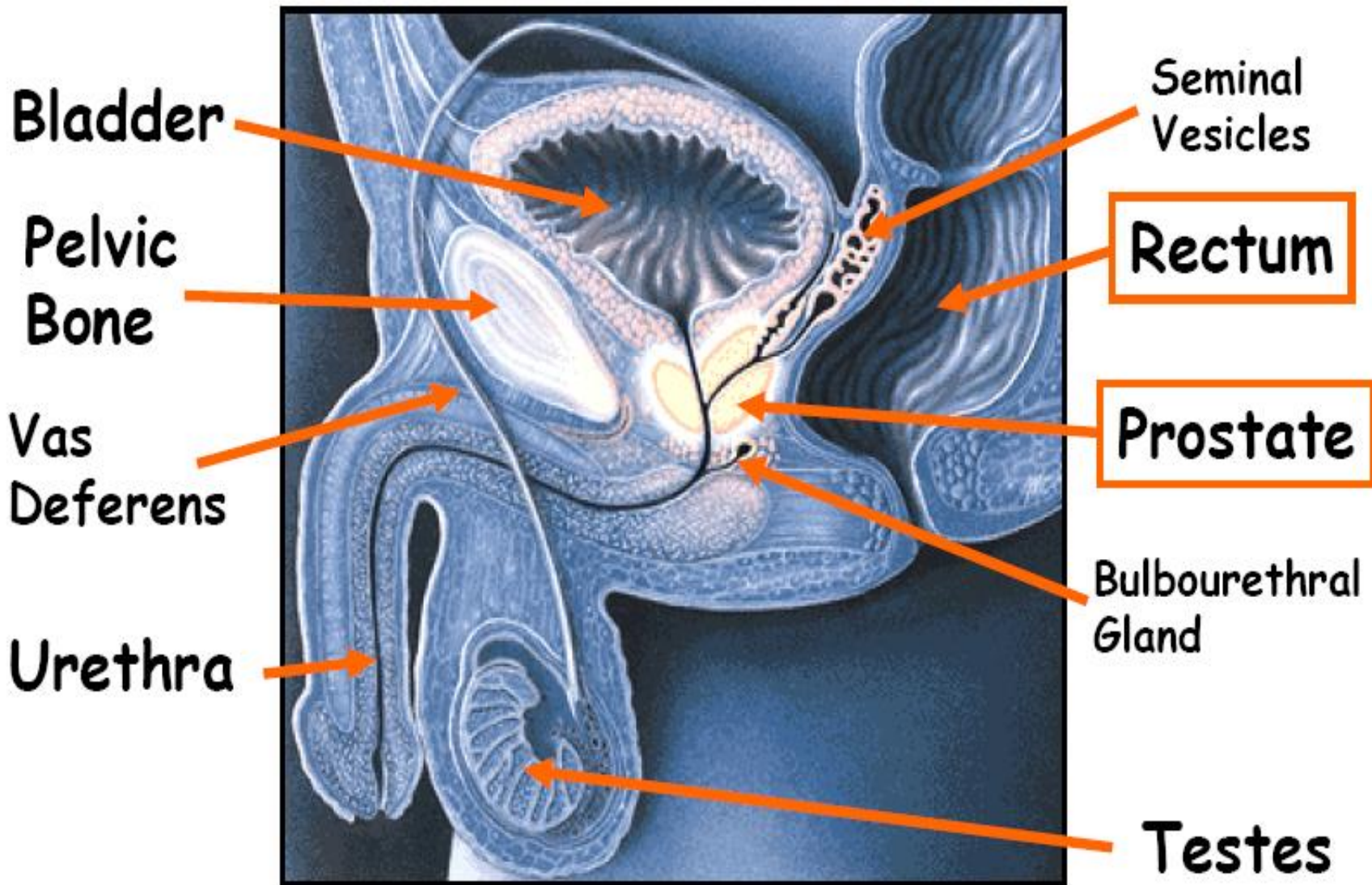
In Nigeria

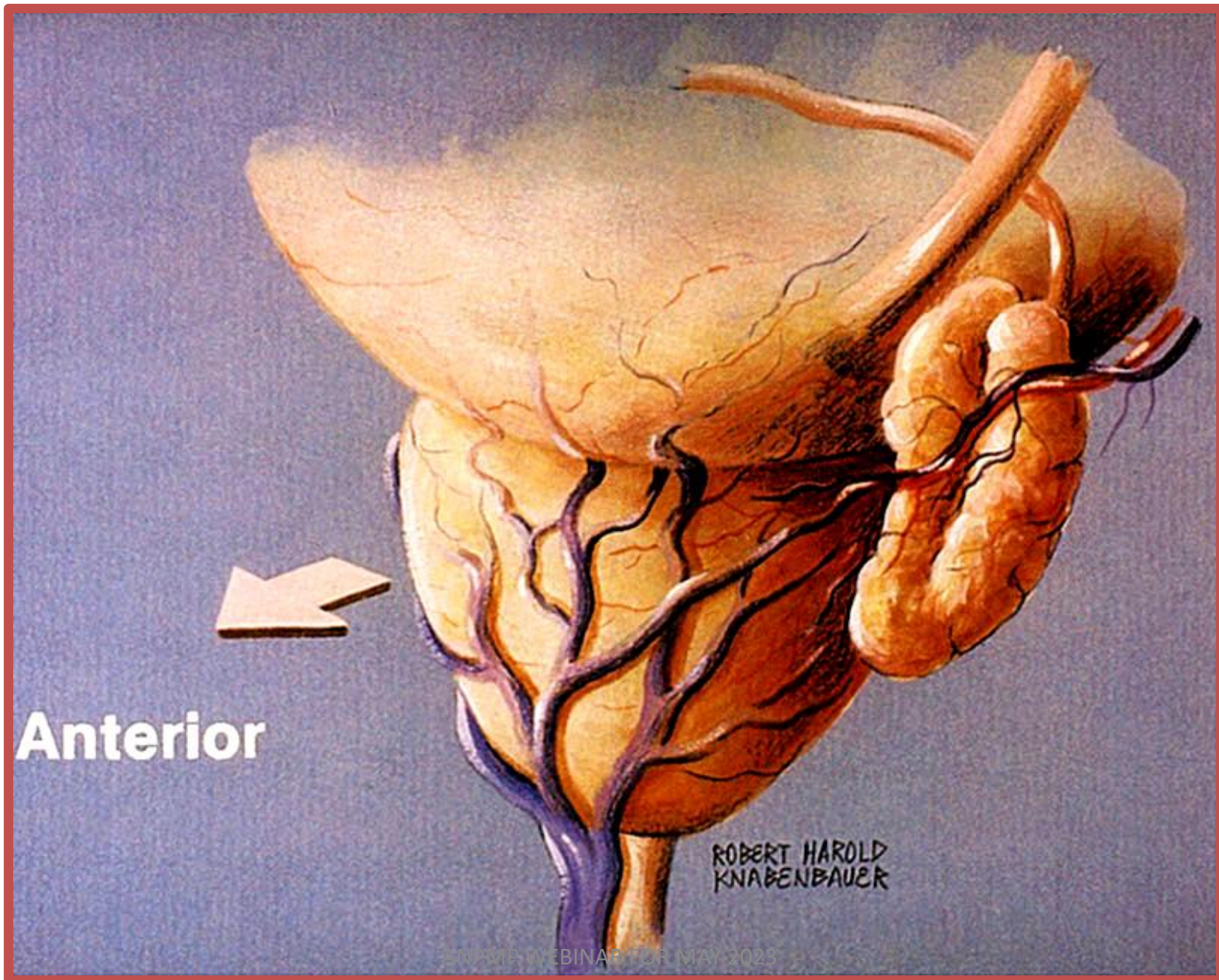
- Carcinoma of the Prostate is the most common malignancy in adult males

GENERAL POINTS

- Enlargement of the Prostate gland is expected with increase in Age.
- Problems of Prostatic enlargement is common among aging men
- It has great economic burden and affects quality of life of the individual and their Family
- BPH and CAP represents the most significant of these problems

WHAT IS THE PROSTATE GLAND?





Anterior

ROBERT HAROLD
KNABENBAUER

PROSTATE GLAND REVIEW

- At birth, it is about the size of a pea.
- It begins to enlarge rapidly during puberty
- Attains its full adult size and shape when a man reaches his early 20s.
- The prostate begins to grow further as men reach their 40s.
- Walnut (Colanut) shaped organ encircles bladder neck and urethra
- Weighs about 20gm and 4cm X 3cm X 2cm in dimension.

FUNCTION OF PROSTATE THE GLAND

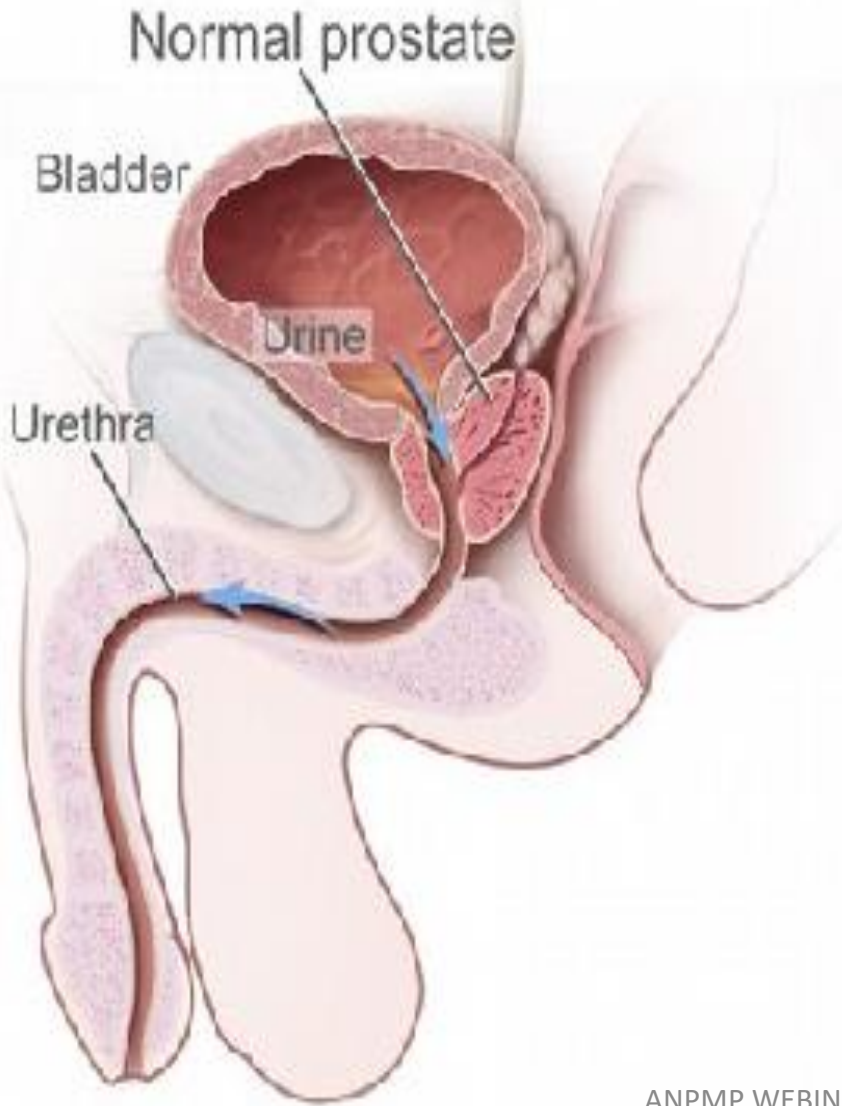
- EXACT FUNCTION UNKNOWN
- SECRETIONS PART OF HUMAN EJACULATE
 - ❖ Maintains Vitality of Sperms
- Productions of Enzymes Such as PSA

Prostatic Enlargement

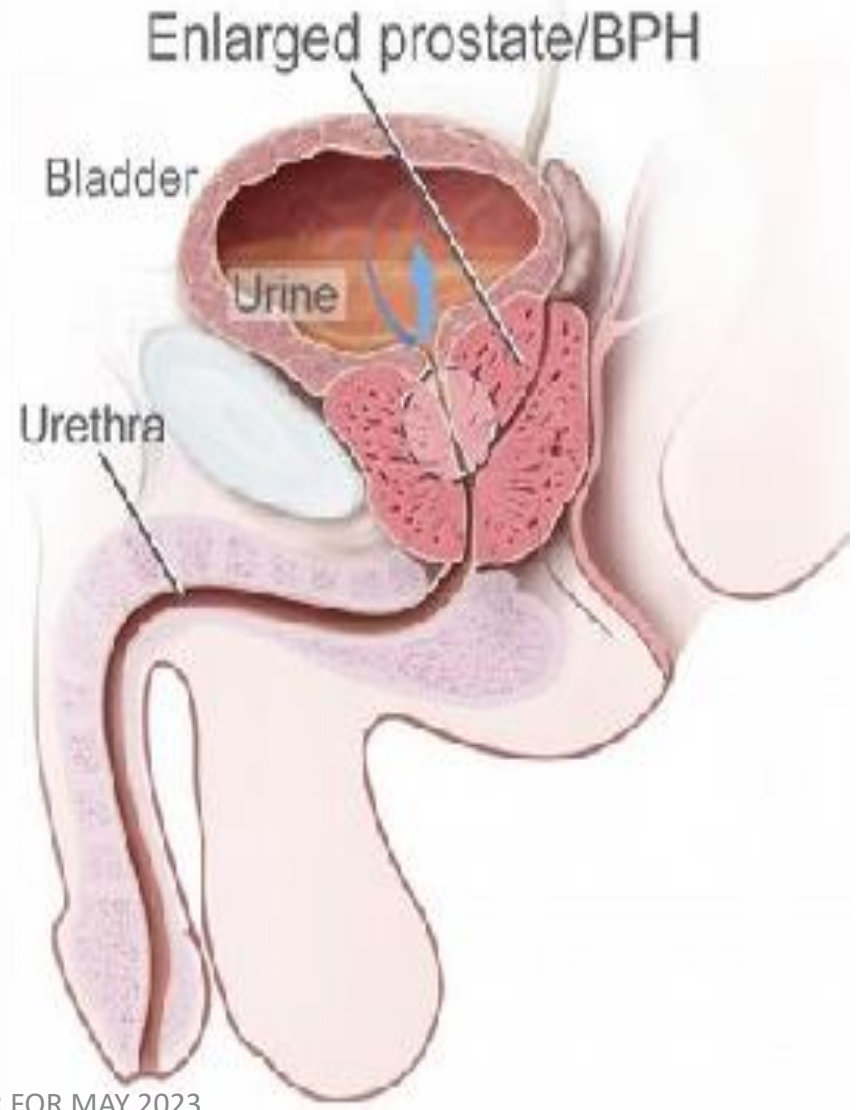
- BPH – Benign Prostatic Hyperplasia
- Cancer of the prostate

BENIGN PROSTATIC HYPERPLASIA (BPH)

A



B



BENIGN PROSTATIC HYPERPLASIA (BPH)

- *BPH occurs more frequently as men age.*
- *Affects 50% of men (51 to 60 years), and*
- *90% of men older than 80yrs*

Causes of BPH

- Exact cause of BPH is not known.
- AGEING
- POSITIVE FAMILIAL & GENETIC FACTORS
- PRESENCE OF FUNCTIONING TESTES
- NORMAL ANDROGEN LEVELS
- INCREASE IN 5- α REDUCTASE ACTIVITY
- OESTROGEN IMBALANCE
- INCREASED EPITHELIAL CELL HYPERPLASIA
- INCREASED ACTIVITY OF GROWTH FACTORS.

Symptoms of BPH

- LOWER URINARY TRACT SYMPTOMS (LUTS)
 - Obstructive LUTS: Hesitancy
 - Poor Stream
 - Straining
 - Intermittency
 - Terminal Dribbling
 - Incomplete Bladder Emptying

Irritative LUTS

- Urinary Frequency
- Nocturia
- Urgency
- Urge Incontinence

Other Symptoms/Complications

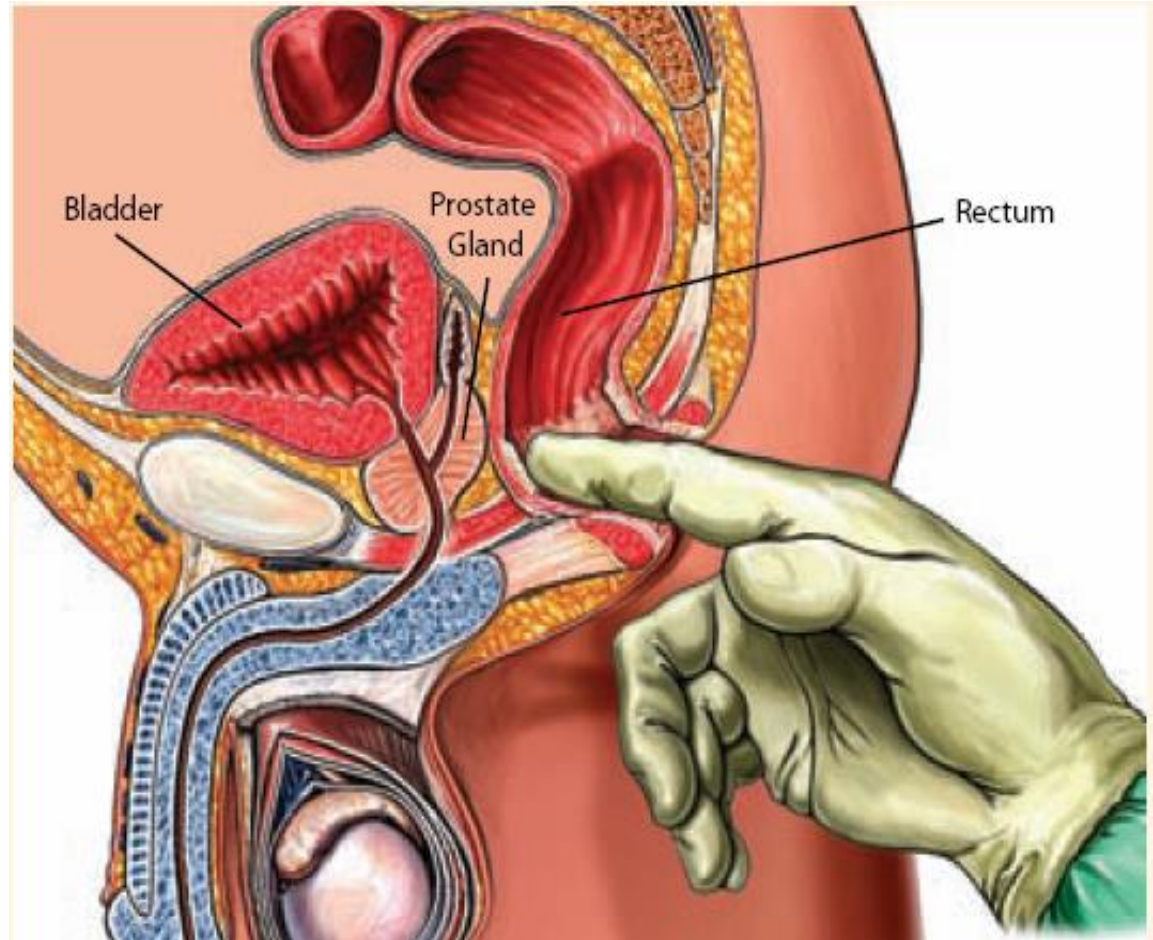
- Urinary Retention (Acute, Chronic)
- Infections
- Urinary Calculi
- Renal Impairment
- Haematuria

Clinical Evaluation

- Digital Rectal Examination
- Prostate-Specific Antigen (PSA)
- Ultrasound – Transrectal
 - Abdominal

Digital Rectal Examination

Assesses
the size, shape
and
texture of the
prostate via the
rectum



Prostate Specific Antigen (PSA)

- ORGAN SPECIFIC but Not Disease Specific:

NORMAL LEVEL : 0-4ng/ml

Border Line : 4- 10ng/ml

Suspicious : > 10ng/ml

- CLINICAL MEASUREMENT:

PSA-T: 0-4ng/ml

PSA-V: < 0.75ng/ml/yr;

PSA-D: < 0.15ng/ml

Differential diagnosis

- URETHRAL STRICTURE
- CARCINOMA OF THE PROSTATE
- BLADDER NECK OBSTRUCTION
- CARCINOMA OF THE BLADDER
- BLADDER CALCULUS
- NEUROGENIC BLADDER
- DIABETES MELLITUS
- DEPRESSION

CARCINOMA OF THE PROSTATE (CAP)

Introduction

- CaP is the most commonly diagnosed male cancer worldwide
- Prostate cancer affects 1 in 10 men
- Most common cancer in men in Nigeria
- In USA - 85% of patients with CaP present with local and regional disease

Introduction

- In Nigeria –75% of patients present with locally advanced and metastatic disease
- 95% of cancers are detected in men 45-89 years old. (median age 72 years.)

Epidemiology/ Statistics

- 127/100,000 – estimated hospital incidence.
- 20,000 deaths per annum in Nigeria (UCH estimate)
- 8,000 deaths per annum in UK
- 28,000 deaths per annum in USA
- Higher mortality in blacks

Western Africa	Cases	Prevalence (1 Year)	Prevalence (5 Years)	Mortality
<i>Benin</i>	255	203	677	210
Burkina Faso	305	229	741	261
<i>Cape Verde</i>	14	12	37	13
Cote d'Ivoire	847	654	2,119	706
The Gambia	14	11	39	13
<i>Ghana</i>	921	734	2,451	758
<i>Guinea-Bissau</i>	61	48	159	49
Guinea	168	134	447	138
Liberia	99	79	265	84
Mali	204	155	504	174
<i>Mauritania</i>	117	93	310	96
Niger	176	133	429	149
Nigeria	6,236	4,932	16,237	5,098
Senegal	131	101	341	112
<i>Sierra Leone</i>	197	158	528	161
Togo	200	159	534	165
Region Total	9,947	7,835	25,818	8,189

Crude and Age-Standardised (World) rates, per 100000

Countries for which no data are available are in *italics*.

GLOBOCAN 2002, IARC

<http://www-dep.iarc.fr>

Incidence

- Commonest male cancer in Nigerian males (Globacan 2012)
- 8th commonest male cancer in 1969 (Nkposong, Lawani)
- Commonest male cancer by 1996 (Ogunbiyi, Shittu)

Incidence

- Jedy-Agba et al (2012)
 - Ibadan and Abuja Registries
 - Commonest male cancer
 - 21.7% (Ibadan)
 - 28%(Abuja)
 - Mean age of diagnosis
 - 68.2years (Ibadan)
 - 66years (Abuja)

Diagnosis

- Late presentation still the norm
 - Two-third present with metastasis (Ekwere, Dawan, 2002)
 - Relatively high PSA at presentation
 - 92.6ng/ml (Abbiyesiku, 2000)
 - 106ng/ml (Ekwere, 2002)

Waiting Times for Diagnosis

- Median of 13.3weeks/93days in Nigeria (Omisanjo et al, 2021)
- 7.7 weeks - Poland
- 7.6 weeks – Canada
- 100 days – South Africa

Doctors Ref: PUT 5789
Age/Sex/DOB: 60 / M /
Cell No
Alt. Ref : 08896

Tel : (W) NOT AVAILABLE

Lab Ref : 761113215
MRI No. : NG00122651
Spec # : 1029:EA00014L

Collection Date : 29/10/14 UNK
Received Date : 29/10/14 1554
FINAL Report Date : 30/10/14 1000

Requested : ., PSA

ENDOCRINOLOGY

Test	Result	Reference
> S-PSA	1311.00 ng/mL	H 0.0 - 4.0
.....		
:PSA should be used in combination with digital rectal examination and		
:transrectal ultra-sonography for screening/diagnosis of prostate Ca.		
:		
:PSA levels > 10 ng/mL: Increased probability prostate Ca		
:		
:PSA levels 2.5 - 10 ng/mL: Intermediate values seen in healthy men, benign		
:prostatic hyperplasia (BPH), prostatitis, gland manipulation, prostate Ca		
:Determination of free PSA improves the specificity for prostate cancer		
:detection in this group.		
.....		

consultation by referring doctors only, please call:

Kogie Reddi +2711 358-0977 Dr Jacques De Greef +2711 358 08
S.F. Kuku 080-33068766 Dr David Rambau +2711 358-0649

Registration ID : 1014025664

Registration Date
Reporting Date

Clinical History :- HEALTHCHECK

PSA-Prostate specific antigen, total

<u>Investigation</u>	<u>Result</u>	<u>Units</u>
Prostate Specific Antigen, Serum	2370.000 H	ng/ml

Method : Chemiluminescence Immuno Assay (CLIA).

Result Rechecked.
Please correlate clinically.

Clinical History :- R/O METASTATIC CA PROSTATE

PSA-Prostate specific

Investigation

Result

Prostate Specific Antigen, Serum

1915.000 H

Method : Chemiluminescence Immuno Assay (CLIA).

Result Rechecked.

Please correlate clinically.

Referred By: Dr. AKINBAMI

NF-754

TUMOUR MARKERS

TEST	RESULT	REF. RANGE
PSA(Total)	> 15400.0 ng/mL	0 - 4

Test done on Beckman-Coulter Access2 Immunoassay system

End of Report

Causes

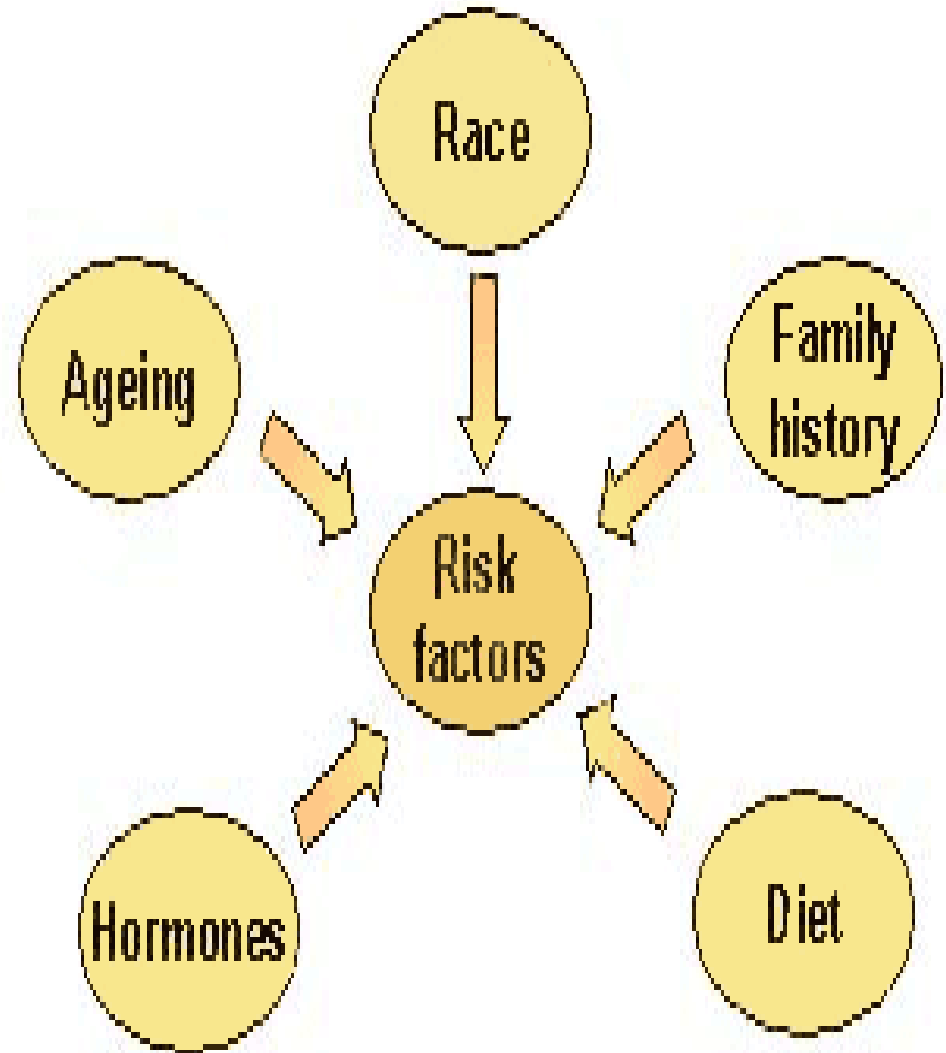
Age: Older men

Ethnic origin: Afro-Caribbean or African-American > Caucasian > Asians

Family history: double the risk

Diet: fatty foods (high in saturated fat) and red meat increase risk, Vegetables like tomatoes decrease the risk.

Hormones – high testosterone levels



Risk for Prostate Cancer

- Age: 80% of CaP cases are diagnosed in men over 65 years
- Race: Higher incidence and mortality rates for African-American males
- Family history of prostate cancer
- Implicated (but not proven) risk factors
 - **Dietary (e.g., high fat diet)**
 - **Androgen exposure**
 - **History of STDs, vasectomy**

Men at High Risk for Prostate Cancer

- African American men (Black Race men)
- Men with one or more first-degree relatives (brother, father) with prostate cancer
- Men with first-degree relatives who received a prostate cancer diagnosis at an early age (younger than 65 years)

Risk for Developing Prostate Cancer

Risk of Being Diagnosed with Prostate Cancer by Age

Age 451 in 2,500
Age 501 in 476
Age 551 in 120
Age 601 in 43
Age 651 in 21
Age 701 in 13
Age 751 in 9
Ever1 in 6

Symptoms

- 1) Asymptomatic
- 2) Lower Urinary Tract Symptoms
- 3) Haemospermia.
- 4) Painful ejaculation.
- 5) Symptoms of Metastases

Symptoms of Metastases

- EASY FATIGUABILITY.
- PARAPLEGIA.
- RESPIRATORY DIFFICULTIES
- ANEMIA And Leg Edema
- Brain and Ocular metastasis

MANAGEMENT OF PROSTATIC ENLARGEMENT

Prostatic Diseases

- Benign Prostatic Hyperplasia
- Carcinoma of the Prostate

Establishing A Diagnosis

- History
- Physical Examination
- Relevant Investigations

Basic Assessment Of The Prostate

- Digital Rectal Examination
- Serum Prostate Specific Antigen
- Ultrasound Of The Prostate

Digital Rectal Examination

- BPH Vs CAP

Prostate Specific Antigen (PSA)

- Serine Protease
- Commonly raised in CAP
- May be raised in conditions other than CAP

Other Conditions That May Increase PSA

- BPH
- Prostatitis
- Prostatic Infarction
- Prostatic Biopsy
- Prostatic Manipulations

Conditions That May Decrease PSA

- Finasteride
- LHRH Analogues

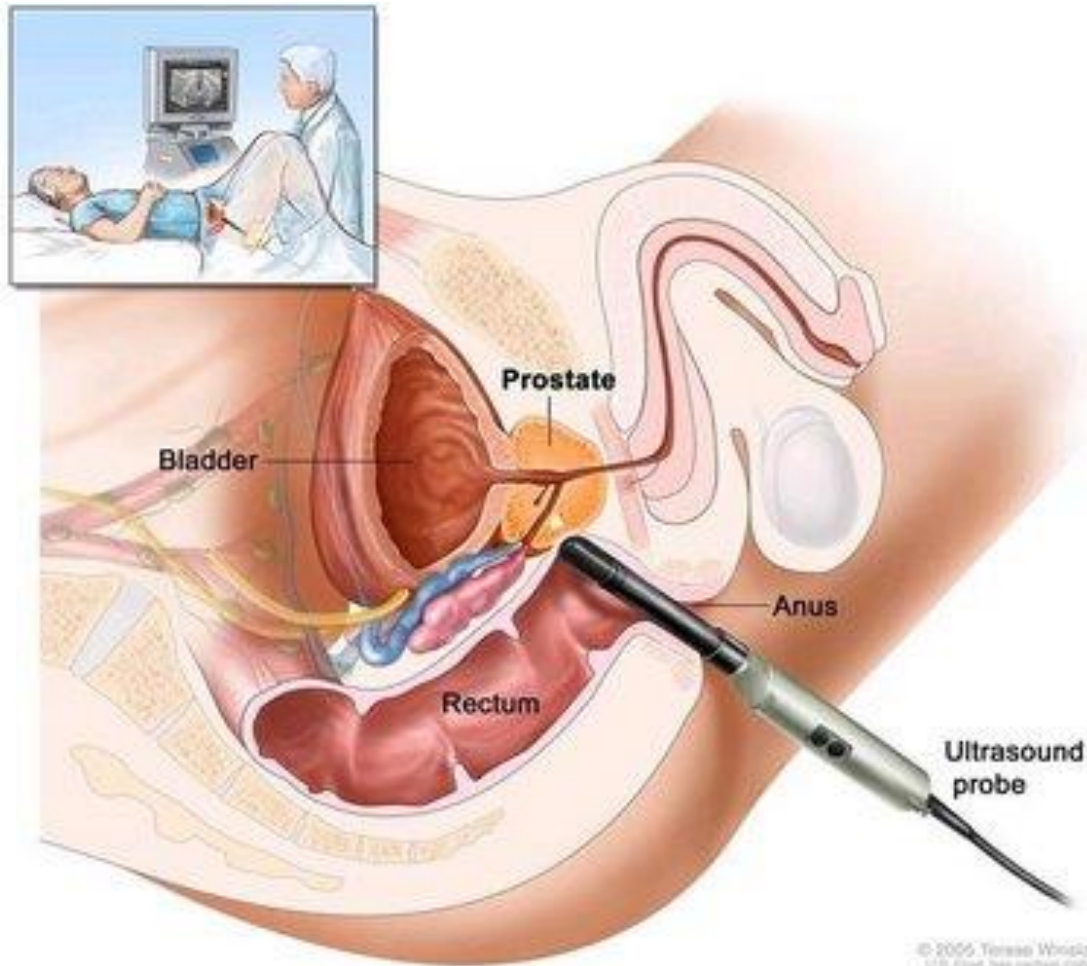
Modifications Of PSA

- PSA Density
- PSA Velocity
- Age Specific PSA
- Free/Total PSA
- Molecular PSA

Ultrasound Of The Prostate

- Transrectal Ultrasound (TRUS)
- Abdominal Ultrasound
- Doppler's Ultrasound

Transrectal Ultrasound



© 2005 Teresa Winslow
U.S. Govt. has certain rights

Transrectal ultrasound. An ultrasound probe is inserted into the rectum to check the prostate. The probe bounces sound waves off body tissues to make echoes that form a sonogram (computer picture) of the prostate.

Ultrasound Findings In BPH

- Enlargement
- Homogeneous Echopattern
- Intact/Regular Prostatic Capsule

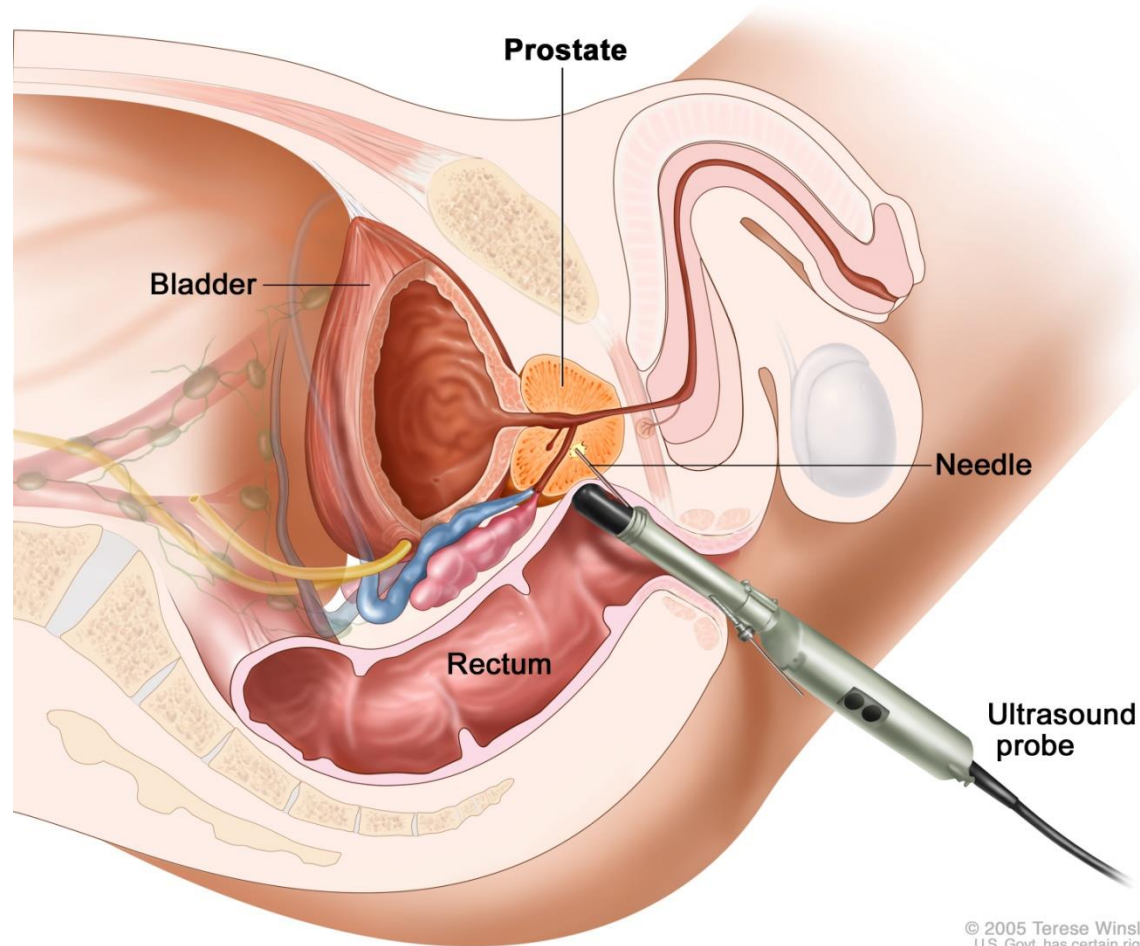
Ultrasound Findings In CAP

- Enlargement
- Heterogeneous Echopattern
- Irregular Capsule

Prostatic Biopsy

- Transrectal
 - Ultrasound Guided
 - Blind
- Transperineal

Transrectal USS-guided biopsy



Trucut Biopsy Needle



(a)



(b)

Other Investigations

- Endorectal MRI
- KUB Ultrasound
- Cystoscopy
- Molecular Staging
- Investigations To Stage Carcinoma
 - Bone Scan
 - X Rays- Spine
 - Chest
 - Pelvis

Other Investigations II

- Haemogram
- Urinalysis, MCS
- Serum Electrolytes
- Urodynamic Studies

BENIGN PROSTATIC HYPERPLASIA

DIAGNOSED BPH

- Suggestive History
- DRE – Benign Features
- PSA – Usually Normal
- Ultrasound – Homogenous Prostate

Treatment Of BPH

- Role of IPSS
- Watchful Waiting
- Medical Treatment
- Conventional Surgical Treatment
- Minimally Invasive Treatment

Watchful Waiting

- IPSS 1-7
- Elderly with Severe Comorbidity
- Regular Monitoring

Medical Treatment

- Alpha Receptors Blockers
 - Non-selective (Prazocin, Doxacocin)
 - Selective (Tamsulosin, Alfuzosin)
- 5 Alpha Reductase Inhibitors
 - Finasteride
 - Dutasteride
- . Antimuscarinics

Medical Treatment II

- Phytotherapy
 - *Pygeum africanum*
 - Saw palmetto
 - *Urtica dioica*

Conventional Surgical Treatment

- Open Prostatectomy (Simple)
- Transurethral Resection Of The Prostate (TURP)

Minimally Invasive Treatment

- LASER
- High Intensity Focused Ultrasound (HIFU)
- Hyperthermia (TUMT)
- Intraurethral Stents
- Transurethral Balloon Dilatation
- Urolift

MANAGEMENT OF CARCINOMA OF THE PROSTATE

DIAGNOSED CAP

- Suggestive History
- DRE - Malignant
- PSA - Elevated
- Ultrasound – Heterogeneous Prostate

Treatment Of Carcinoma Of the Prostate

- Depends on
 - Stage Of The Disease
 - Grade Of The Tumour (Gleason Score, ISUP)
 - Life Expectancy
 - Physician's Preference

Watchful Waiting/Active Surveillance

- Early Stage Disease
- Low Grade
- D'Amico Classification – Risk Stratification

When Treatment Is Needed

- Localised Disease
- Locally Advanced Disease
- Recurrent Disease
- Metastatic Disease

Localised Disease

- Radical Prostatectomy
- Radiotherapy
- HIFU
- Cryotherapy

Locally Advanced Disease

- Radiotherapy + ADT

Recurrent Disease

- Radiotherapy

Metastatic Disease

- Initial Endocrine Therapy (ADT)
- Hormone Refractory Therapy (Castrate Resistant Prostate Cancer)

Initial endocrine Therapy(ADT)

- Testosterone Reduction Is Ultimate Goal
- Options
 - Surgical Castration (Orchiectomy)
 - Medical Castration
 - : Antiandrogens (Flutamide)
 - : LHRH Analagues (Goserelin)
 - : Combined Androgen Blockage

Hormone Refractory CAP(CRPC)

- Hormonal Manipulation
- Chemotherapy
- Emerging Trend in Metastatic CAP

Laparoscopic Surgery For CAP

- Non-robotic
- Robotic



ANPMP WEBINAR FOR MAY 2023

Other Minimally Invasive Rx For CAP

- Cryotherapy
- HIFU
- LASER

Treatment Of Bone Metastasis

- Radiotherapy
- Bisphosphonates
- Analgesia
- Physiotherapy (Paraparesis)

Symptomatic Treatment For CAP

- “Channeling” TURP
- Analgesia

Terminal Care

- Support the patient
 - Psychological
 - Spiritual
- Make the patient comfortable
 - Adequate Analgesia
- Maintain his dignity
 - Treat bedsores

Can CAP Be Prevented?

- Chemoprophylaxis
- Screening
- Diet
- Lifestyle

Argument For Screening

- Early Detection and Treatment is associated with better PROGNOSIS

Argument Against Screening

- CAP is an indolent tumour
- Treatment for early stages may be associated with unnecessary morbidities.

Current Controversy

- USPSTF
- AUA
- EAU

Screening and Early detection

- Practically Nonexistent
- Lagos State Government Screening Prog
- Ikuerowo, Omisanjo et al
 - 4172 men
 - Mean Age : 60.8years
 - Prevalence Rate : 1.046%
 - Only 26% had organ confined disease
 - 35% already had distant metastasis

Conclusion Of The Matter

- CAP is the commonest Male Malignancy
- Prognosis Good For Early Cases
- Valid Argument for men < 60/70 years

Men's Health Issue

- Andropause
- Metabolic Syndromes
- Lifestyle Modification
- Screening for Other Cancers
- Need for a Health Plan
- Nature Vs Nurture

Role of GPs

- Screening
- Diagnosis
- Continuing Care (Back Referral)
- Specific Treatment
 - Uncomplicated BPH
 - Liason with specialists
- Terminal Care
- Advocacy

Take Home Points

- Prostate diseases are common
- They are curable when picked early
- THEY CAN BE DIAGNOSED EARLY
- SCREENING! SCREENING !! SCREENING!!!
- ADVOCACY! ADVOCACY!! ADVOCACY!!!

THANK YOU 4 LISTENING





www.anpmp.org